

# Manitoba Health

## Statistical Update: HIV and AIDS

*Report to December 31, 2010*

**Public Health**

**Public Health and  
Primary Health Care Division**

## MANITOBA HEALTH STATISTICAL UPDATE: HIV and AIDS to December 31, 2010

### INTRODUCTION

This report is intended to provide surveillance (statistical) information about newly reported HIV and AIDS cases in Manitoba. This includes new cases of HIV and AIDS in Manitoba reported to the Public Health Surveillance Unit within Manitoba Health up to December 31, 2010. The 2010 HIV data presented here includes an examination of new HIV cases by: Age and Sex Distribution, Geographic Region, Ethnicity, and Risk Exposure Category (Primary Mode of Transmission). The historical statistical data tables are also included in the appendices at the end of this report. The analysis of AIDS data are limited due to the small number of cases reported in recent years; however statistical data tables are presented.

### Notes Regarding the Interpretation of HIV Data

- Changes in the number of HIV positive individuals as well as observed trends must be interpreted with caution. There are a number of factors which may contribute to these changes, for example, changes in testing or reporting patterns among care providers.
- The number of new HIV cases may not be a reflection of the true number of new HIV infections per year (i.e. incidence) in the Manitoba population. It is possible for an individual to be tested with a non-nominal identifier and use nominal testing for a subsequent test. In this case, linkage of results can only be done when client consent is provided. In addition, cases that have tested positive in another province or country are also reported to the Public Health Surveillance system as new cases to Manitoba.
- Information about ethnicity and risk exposure categories are self-reported by the individual following interview by health care provider or public health nurse. This can be subject to bias leading to possible under-reporting (or alternatively, over-reporting) of factors which may differ from year-to-year. There have also been challenges in obtaining completed case investigation reports in recent years.
- The categories of risk exposures presented in this report reflect the most likely mode of transmission of HIV for a new HIV case. Although more than one risk factor or exposure may be reported through the case investigation form, individuals are assigned to a "Primary Mode of Transmission" category based upon a pre-determined hierarchy. For simplicity, the term "Risk Exposure Category" is equivalent to "Primary Mode of Transmission" in this report. Further information can be found in the Technical Notes (Appendix A).

## Data Highlights for 2010

- There were 124 newly positive HIV cases reported in 2010, compared to 106 new HIV cases in 2009. While this is higher than that seen in previous 10 years, it should be noted that 29 cases reported that they had been previously tested and diagnosed outside of Manitoba, however this was the first time being identified as a case in Manitoba.
- In 2010, 70% of all cases (n=87 cases) were male and 30% were female (n=37 cases). Fewer female cases were reported compared to 2009, when females represented 45% of all cases.
- The majority (83%) of new HIV cases were residents of the Winnipeg RHA at the time of testing and diagnosis.
- The three main Ethnicity categories reported were: Aboriginal (this includes First Nations, Inuit and Métis), accounting for 33%; Caucasian, 28%, and African/ African-Canadian, 20%. It should be noted that 13% of new cases did not report on ethnicity in 2010.<sup>1</sup>
- The three main Risk Exposure Categories (Primary Mode of Transmission) reported in 2010 were: Heterosexual contact (which accounted for 31% of cases), Men who have sex with men (20%) and Endemic (17%).<sup>1</sup>
- There were three (3) AIDS cases reported in 2010 compared to two (2) AIDS cases reported in 2009.

### Context within Canada:

- At the end of 2009, Manitoba had the third highest reported rate of newly positive HIV adults (15 years of age and older) among the provinces and territories. However in terms of absolute numbers, cases from Manitoba accounted for 4.3% of newly positive cases in Canada that year.

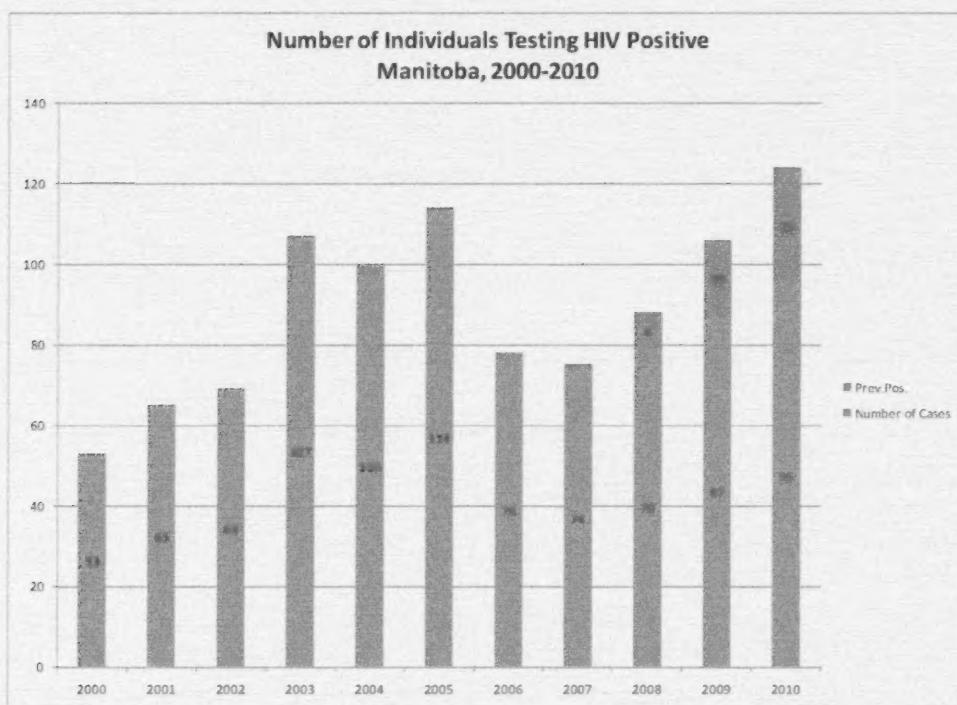
*Source: Public Health Agency of Canada. HIV and AIDS in Canada. Surveillance Report to December 31, 2009. Surveillance and Risk Assessment Division, Centre for Communicable Diseases and Infection Control, Public Health Agency of Canada, 2010.*

<sup>1</sup> Changes in reported percentages from the previous year should be interpreted with caution as there had been a large proportion of case reports either missing or incomplete for both ethnicity and risk factor information in 2009.

## Number of New HIV Cases

Between January 1, 2010 and December 31, 2010, there were 124 new cases of HIV reported in Manitoba based on laboratory-positive HIV antibody test; this is comprised of 87 male cases and 37 female cases. All positive HIV antibody tests that were reported to the Manitoba Health Public Health Surveillance System as new cases (i.e. not found in the system previously) are included in this annual total (see Appendix A for further information about reporting of HIV in Manitoba), these cases are considered *new to the Manitoba surveillance system*. It should be noted that 29 of the 124 newly reported HIV cases indicated that they had tested positive for HIV previously in another province or country outside of Manitoba (red portion of the bar, figure 1). These cases were reported as "new to Manitoba" (i.e. moved to Manitoba from another province or country and were already known to be HIV positive). It should also be noted that there have been issues with distinguishing repeat testers in the surveillance system who may test under a non-nominal code and repeat the test under name (or vice versa). Every reasonable effort is made to classify repeat testers within the surveillance system; however it is still possible that cases with repeat tests exist in this dataset and in the reported number of new cases for 2010.

Figure 1: Annual Number of Newly Reported Cases of HIV by Positive HIV Antibody Test, Manitoba, 2000-2010<sup>2</sup>



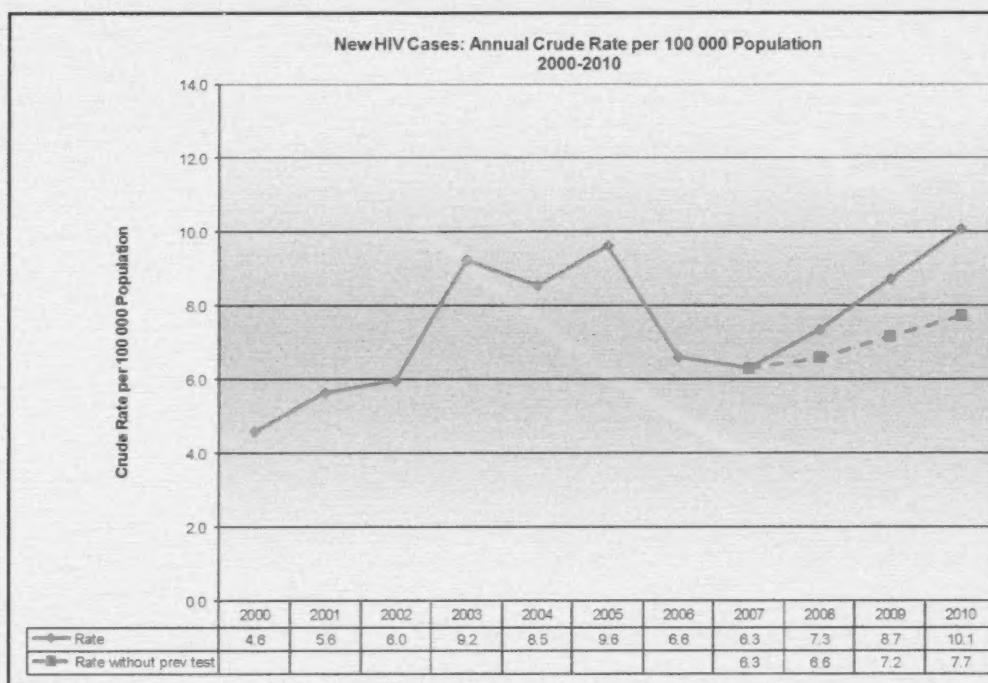
<sup>2</sup> It should be noted that detailed information about previous testers was not available before 2007.

## Rate of Newly Positive Cases

At 10.1 new HIV cases per 100 000 population, the crude rate for 2010 is higher than the previous year's rate (8.7 per 100 000 in 2009) and also higher than the ten-year (average) crude rate reported for 2000-2009 (7.3 per 100 000). Over the previous ten years, the crude rates range from a low of 4.6 per 100 000 population in 2000 to a high of 9.6 per 100 000 in 2005.

For comparison, the crude rates were also calculated with those cases who were known to have been previously tested in another province or country removed, shown in red (Fig 2) this information was consistently available for the year 2007 onwards. Figure 2 illustrates the re-calculated crude rates for 2007-2010 (red broken line). These rates appear to be more aligned with the 10-year average (7.3 per 100 000 population).

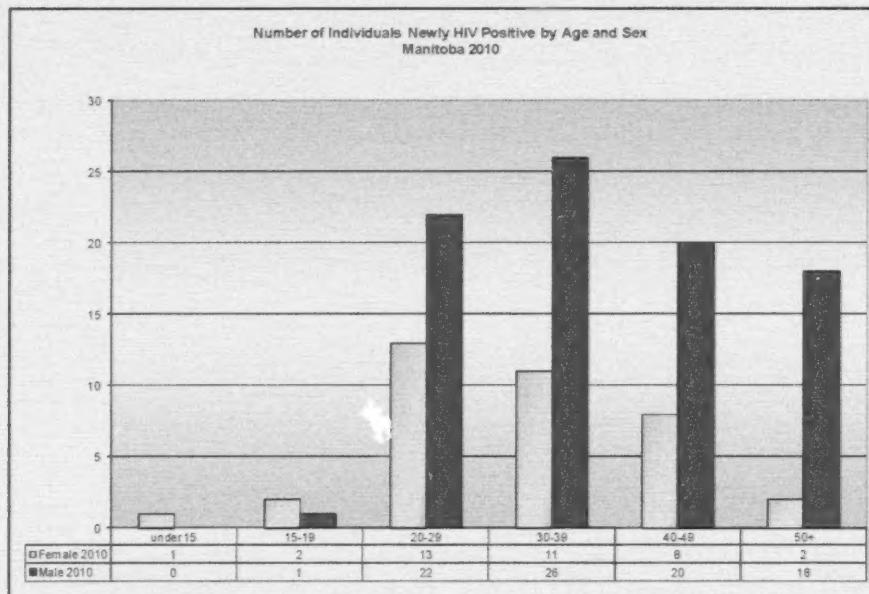
**Figure 2: Annual Crude Rate of New HIV Cases, Manitoba, 2000-2010**



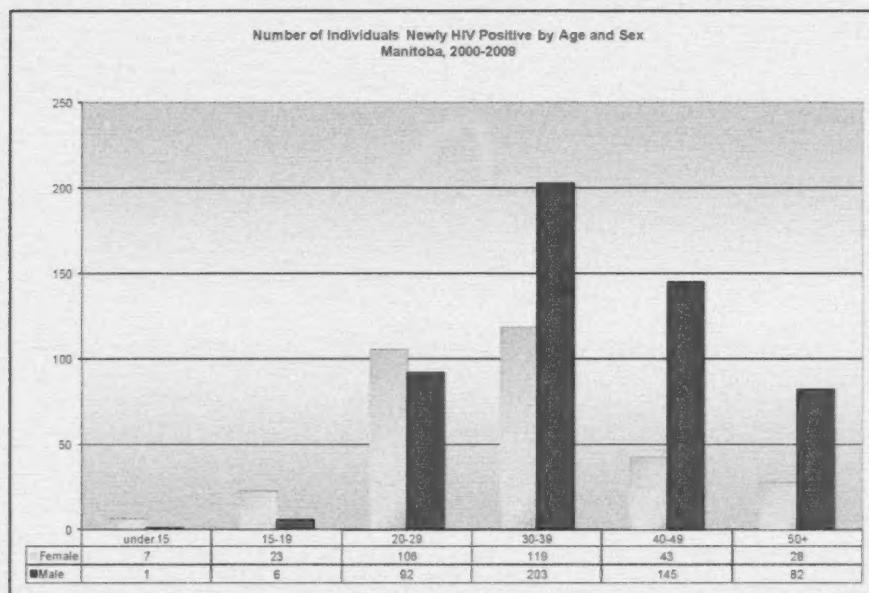
## Age-Sex Distribution of HIV Cases

The following figures compare current and ten-year historical data for age and sex distribution: Figure 3 displays 2010 (n=124 cases) and Figure 4 displays the 2000-2009 data (n=855 cases).

**Figure 3: Number of New HIV Cases by Age and Sex, Manitoba, 2010**



**Figure 4: Number of New HIV Cases by Age and Sex, Manitoba, 2000-2009**



In 2010, the largest proportion of new HIV cases was found in the 30-39 year age group (both sexes combined); accounting for 30% of cases (37 of the 124 cases). Among female cases, the 20-29 year age group accounted for the largest proportion of female cases (13 of the 37 cases, or 35%). Of the male cases, the 30-39 year age group accounted for the largest proportion (26 of the 87 cases, or 30%).

Overall, male cases comprised 70% of the 124 cases; this is a change from the previous year where male cases accounted for 55% of new HIV cases. Of note, are the larger number of cases in the 20-29 age group and 50+ age group among males; the number of males in these age groups were double those found in these age groups in 2009 (see data table in Appendix C).

Between 2000 and 2009, the largest proportion of new HIV cases was also found in the 30-39 year age group (both sexes combined); accounting for 38% of cases reported in this period (322 of the 855 cases). Among male cases, the 30-39 year age group also accounted for the largest proportion of cases (38% or 203 of the 529 cases). While for female cases, the 30-39 year age group accounted for the largest proportion of cases, with approximately 37% of the total number of female cases (i.e. 119 cases, of the 326 female cases).

Of note in the 2000-2009 period, the number of female cases was greater than that of male cases in the younger age groups (under 15, 15-19, and 20-29 year age groups); while number of male cases was greater than that of female cases, in the 30-39, 40-49 and 50-and-older age groups.

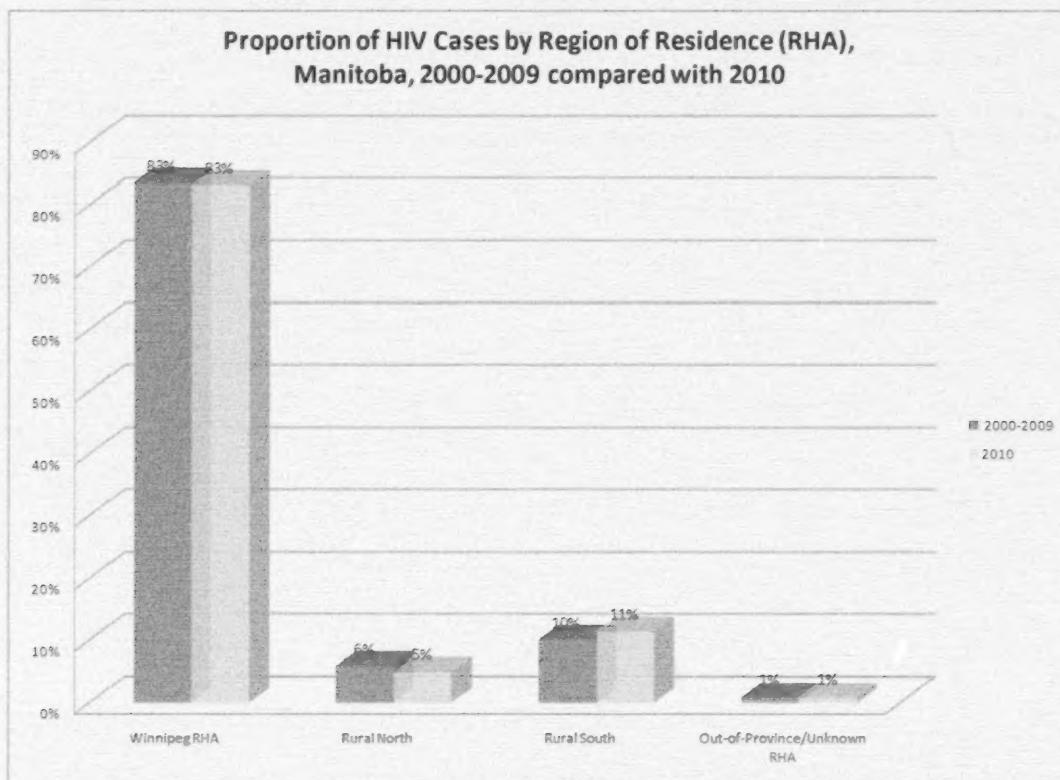
## Geographic Region of Residence

In 2010, as in previous years, the majority of new HIV cases were residents of the Winnipeg RHA at the time of testing (103 of the 124 cases, or 83%). Fifteen per cent (16%) of new HIV cases were reported as Manitoba residents from RHAs outside of Winnipeg, in 2010. The remaining 1% were out-of-province residents.

The geographic distribution of HIV cases in 2010 is similar to that of the previous ten-year period , 2000-2009 (Figure 6).

A detailed data table with RHA-specific information is provided in Appendix C.

**Figure 6a: Proportion of New HIV Cases by Region of Residence (RHA), Manitoba, 2000-2009 compared to 2010**



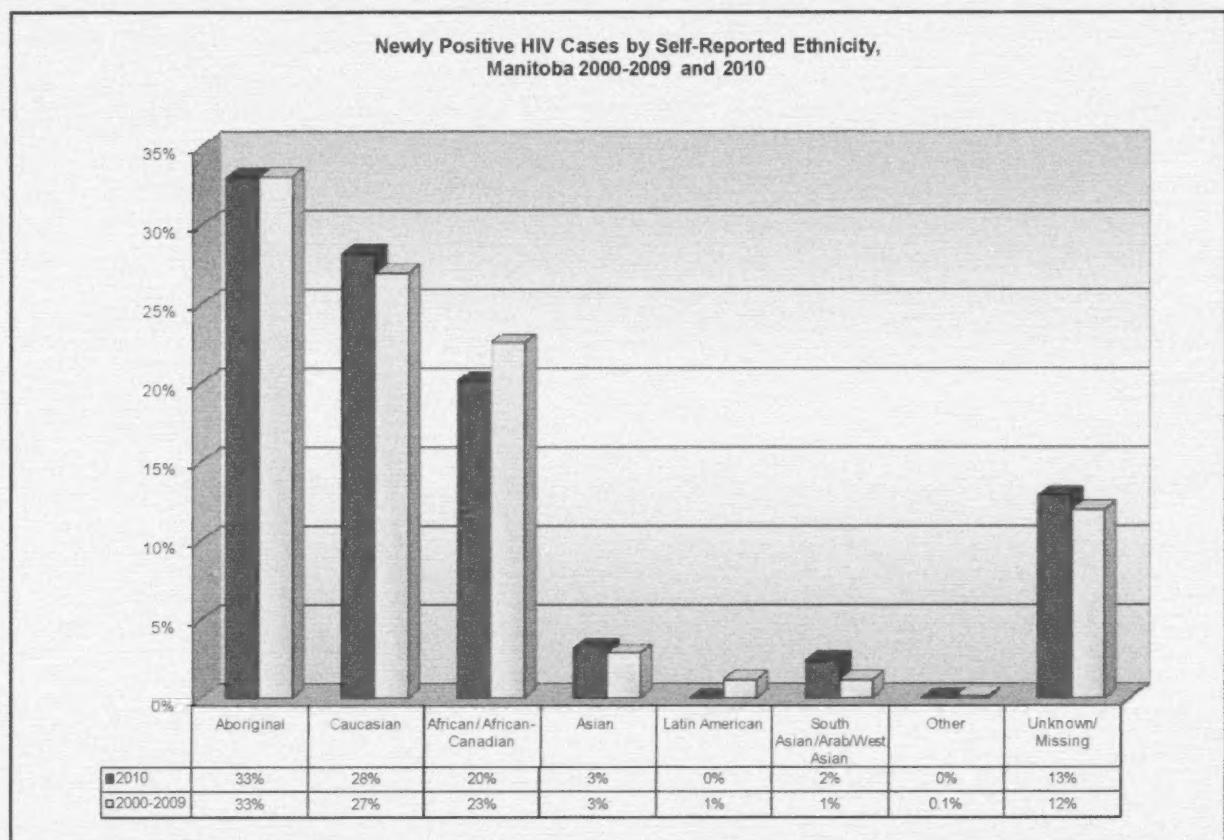
Note that the Rural North included: Burntwood, Churchill, NorMan and North Eastman RHAs. The Rural South included: Assiniboine, Brandon, Central, Interlake, Parkland and South Eastman RHAs.

## Self-Reported Ethnicity

In 2010, 33% of the 124 new HIV cases self-reported ethnicity as Aboriginal; this includes First Nations, Inuit, and Métis, as reported by the individual. Twenty-eight per cent (28%) of new HIV cases reported Caucasian and 20% African/African-Canadian (this includes Haitian and other Caribbean) ethnicities.

This is in general, consistent with ethnicity information reported in the previous 10 years (between 2000 and 2009; includes n=767 cases); over this period, self-reported ethnicity included Aboriginal (33%), Caucasian (27%) and African/African-Canadian (23%).

**Figure 7: Distribution of Self-Reported Ethnicity Categories, Manitoba 2010  
With Comparison to 2000-2009**



Ethnicity data should be interpreted with caution particularly with comparisons to previous years due to the larger proportion of Unknown/ Missing ethnicity information (29%) in 2009. Missing information creates a data limitation and it is difficult to determine if the comparisons to 2009 data reflect true changes in ethnicity patterns among cases reported in 2010.

## Risk Exposure Categories: Primary Mode of Transmission

The categories of risk exposures presented in this report reflect the most likely mode of transmission of HIV for a new HIV case. Although more than one risk factor or exposure may be reported through the case investigation form, individuals are assigned to a "Primary Mode of Transmission" category based upon a hierarchy, which has been used in production of this statistical report since 2002 (Figure 8). This hierarchy groups cases with similar risk exposures, however, if more than one risk factor is reported, the hierarchy assigns cases based on which factor is most likely to have been the mode of transmission of the virus. The hierarchy used by Manitoba Health is similar (but not identical) to that used by the Public Health Agency of Canada. For simplicity, the term Risk Exposure Category is equivalent to "Primary Mode of Transmission" in this report. Note that the abbreviations used are defined in Appendix A (p.15).

**Figure 8: Manitoba Primary Mode of Transmission Hierarchy<sup>3</sup>**

Males	Females
1. MSM/IDU	1. IDU
2. MSM	2. Endemic
3. IDU	3. Recipient of Blood/ Blood Products prior to 1985
4. Endemic	4. Heterosexual
5. Recipient of Blood/ Blood Products prior to 1985	5. Occupational
6. Heterosexual Contact	6. Perinatal
7. Occupational	7. No identifiable Risk (NIR)
8. Perinatal	
9. No identifiable Risk (NIR)	

It should be noted that : MSM/IDU includes cases with risk factors reported as men who have had sex with men (MSM) and injection drug use (IDU). The Endemic category includes the following risk factors: birth in an HIV-endemic country, sexual contact with a person from an HIV endemic country, and Injection Drug Use (IDU) within an HIV-endemic country. No identifiable risk (NIR) is the category assigned to a case when no risk factor information is available from the case report form (including when the case report form was not completed).

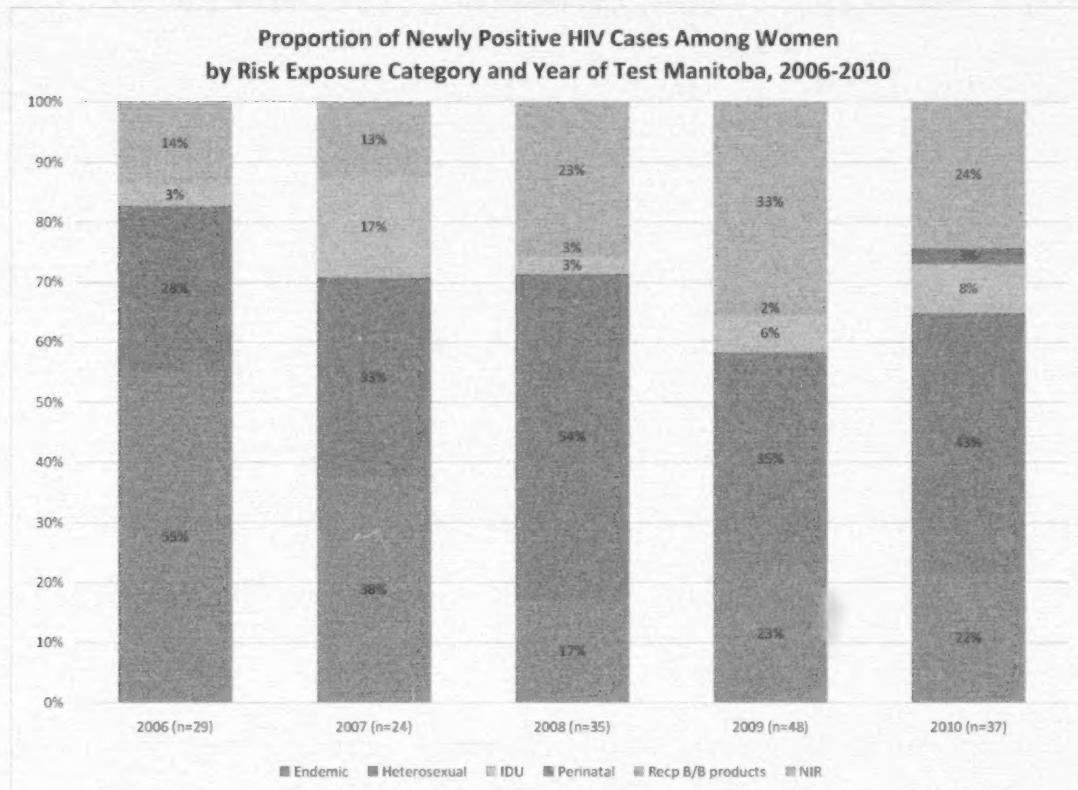
Challenges in obtaining completed case reports have been noted in recent years. Therefore, risk exposure category information presented for 2008-2010 should be interpreted with some caution particularly with comparisons to previous years due to the varying degrees of incomplete risk factor information for this period. Missing information creates a data limitation and it is difficult to determine if the distribution of risk exposure categories (in terms of percentages of total number of cases) shown in the 2010 data reflect true changes.

<sup>3</sup> Definitions of Primary Mode of Transmission categories and list of abbreviations are provided in Appendix A.

## Risk Exposure Categories: Female HIV Cases

In 2010, Heterosexual Contact was the predominant primary exposure category among female HIV cases accounting for 43% of female cases (16 of 37 cases, or 43%); this is followed by the Endemic category accounting for 22% (11 of 37 female cases) and IDU with 8% (3 of 37 cases).

**Figure 9: Female HIV Cases by Risk Exposure Category (Primary Mode of Transmission), Manitoba, 2006-2010**



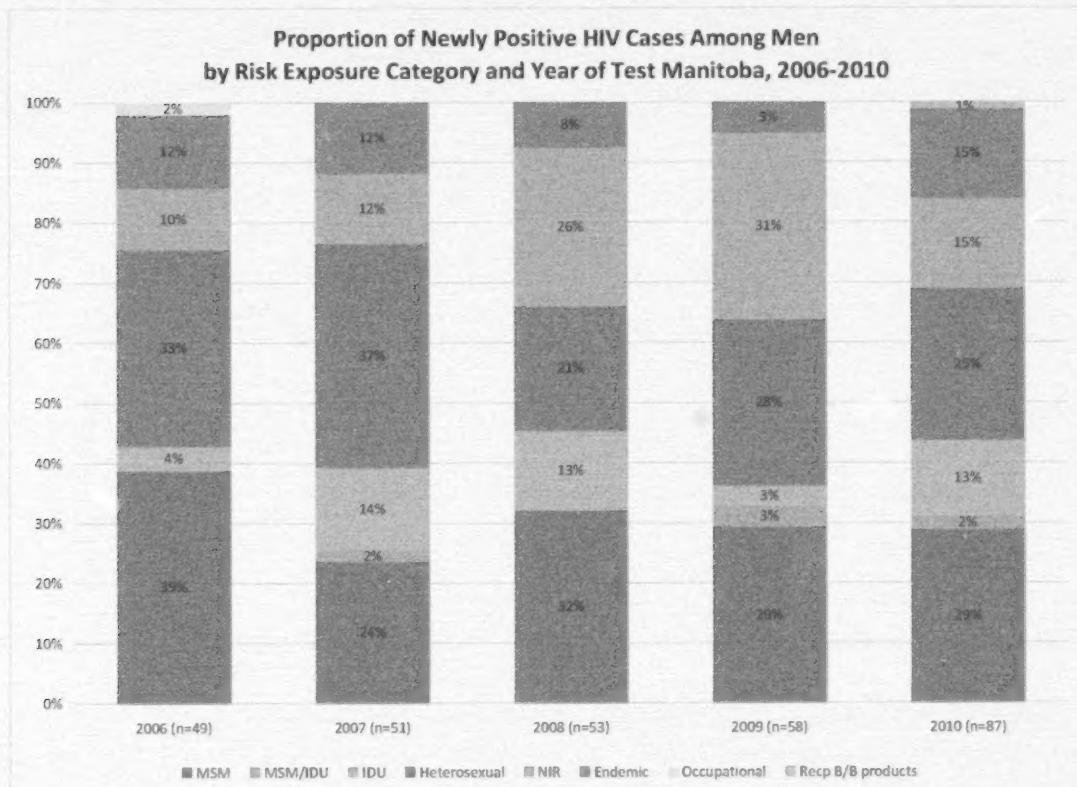
These data should be interpreted with caution as there was a notable proportion of female cases with No Identifiable Risk (NIR) reported in 2010, where typically, no risk factor information was collected from these cases. This appears to be an issue in 2008 and 2009 as well, making it difficult to interpret trends in risk factors for transmission and acquisition of HIV.

Data tables presented in Appendix C.

## Risk Exposure Categories: Male HIV Cases

In 2010, MSM (without evidence of IDU) was the predominant primary risk exposure category accounting for 29% of male cases (25 of 87 cases); this is followed by Heterosexual contact, 25% (22 of 87 cases). Endemic as a risk exposure category, accounted for 13 cases or 15%. It is also notable that IDU accounted for 13% of male cases, which is a higher percentage relative to the previous year, however similar proportions were noted in 2007 and 2008.

**Figure 11: Male HIV Cases by Risk Exposure Categories,  
Manitoba, 2006-2010**



Data tables presented in Appendix C.

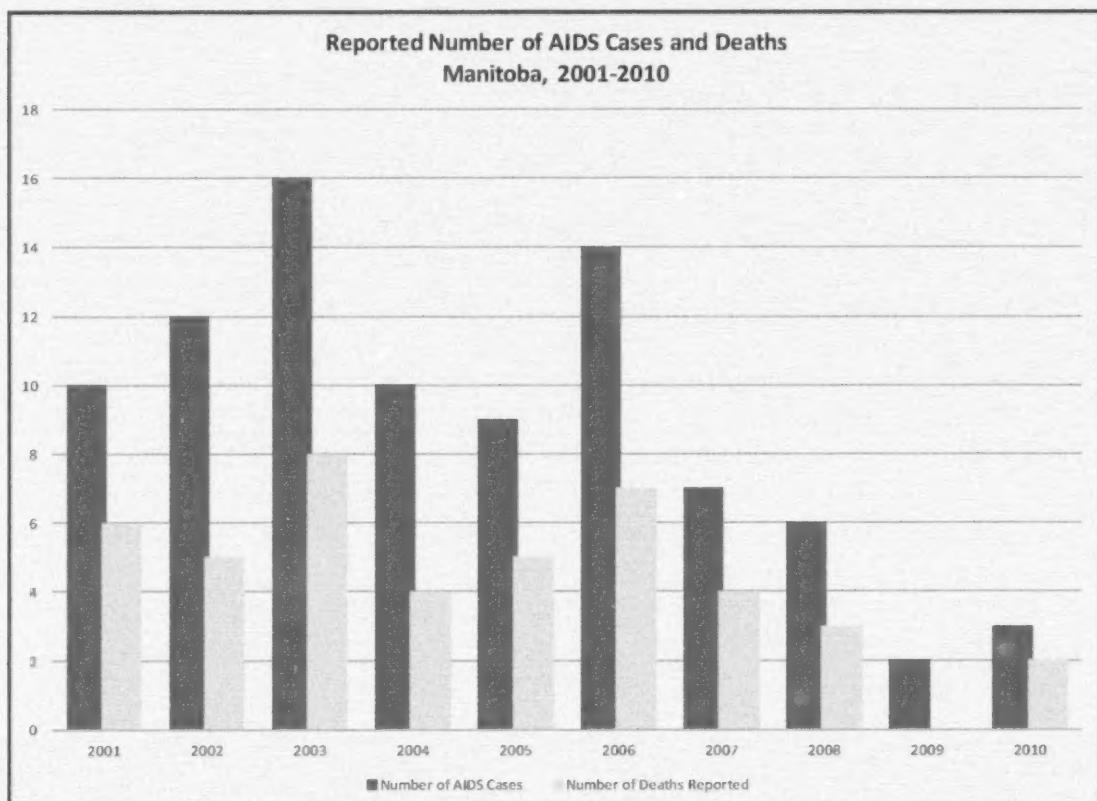
## **AIDS Cases –Reported To December 31, 2010**

This report describes AIDS cases based on year of diagnosis of their first AIDS defining illness and this may not be the same as the year that the case was reported to the Public Health Surveillance System (Manitoba Health).

In 2010, **3 new cases** of AIDS were reported; two cases were male and one female. The average age of these three cases was 37 years. Two of the three cases were deceased at the time of report. These case reports bring the total number of AIDS cases to **280** since 1985. Seventy-three percent (73%) of the 280 individuals reported with AIDS have died; however, delays in reporting of both cases and deaths make it difficult to determine the actual mortality rates.

There is variability in the number of reported AIDS cases over the previous ten years. The largest number of cases was reported in 2003, with 16 cases, this was followed by a decrease in 2004-05. Since 2007, there has been a decrease in reported cases -- to 2 cases in 2009, the period low.

**Figure 12: Reported AIDS Cases,  
Manitoba, 2001-2010**



Further descriptive statistical information about AIDS cases can be found in Appendix D.

## APPENDIX A

### Technical Notes

#### Reporting of HIV and AIDS in Manitoba

All confirmatory HIV antibody testing in Manitoba is carried out at Cadham Provincial Laboratory (CPL). Positive HIV antibody test results are subsequently reported to the Chief Provincial Public Health Officer as required by the *Reporting of Diseases and Conditions Regulations, Public Health Act*. Upon receipt of this lab report, the Surveillance Unit of the Manitoba Health will send the *HIV Case Investigation Form for Nominal & Non-Nominal Positive Cases* (see Appendix B) to the ordering healthcare provider for completion and verification of a new or existing case. However, there have been delays in the completion of and return of this form. Consequently, all HIV positive test results are considered new cases unless otherwise advised by the appropriate health care professional.

The expansion of HIV antibody testing occurred on January 1, 2007 and November 1, 2007 with the introduction of nominal (the option of testing under name) and anonymous testing, respectively, in addition to the existing non-nominal testing<sup>4</sup> option. More information describing the three testing options can be found in the Communicable Disease Management Protocol for HIV/AIDS (<http://www.gov.mb.ca/health/publichealth/cdc/protocol/index.html>).

It should be noted that nominal testing has steadily increased since its introduction and in 2009, 87% of newly reported HIV positive cases tested nominally. However, it is also possible for individuals to test using a non-nominal code and to have a subsequent test using different codes or by name. The public health surveillance system has experienced challenges in identifying clients who have had repeat tests; as a result there are concerns with duplicate cases being included as new cases.

AIDS cases and deaths are also reportable by physicians. New AIDS cases and deaths are reported to the Chief Provincial Public Health Officer as required by the *Reporting of Diseases and Conditions Regulations, Public Health Act*. The national *HIV/AIDS Case Report Form* is used in Manitoba for this purpose.

Twice a year, provincial HIV and AIDS case data is reported to the Centre for Communicable Disease and Infection Control, Public Health Agency of Canada for inclusion within the national surveillance report, *HIV and AIDS in Canada*. The variations seen from previous provincial and national reports with respect to the number of HIV and AIDS cases and deaths may be accounted for by delays in reporting as well as continuous update of information in the Manitoba databases. The dataset used in this report was reported to PHAC in April, 2010.

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<sup>4</sup> Under non-nominal testing, only the person ordering the test knows the identity of the person tested and is able to link the result to that person's health care record. So name, address and other personal identifiers are not provided to the laboratory or the public health surveillance system unless consent to share this information is provided (also see Public Health Act (Section 9(4)) for reporting of HIV cases tested under code.)

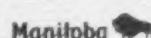
## Definitions Related to Risk Exposure Categories

<b>Term</b>	<b>Definitions</b>
Endemic	<p>Includes persons originating from or having traveled from or resided in an HIV-endemic country.</p> <p>An HIV-Endemic country is defined as a country with "an adult prevalence (ages 15-49 years) of HIV is 1.0% or greater and one of the following: 50% or more of HIV cases attributed to heterosexual transmission; a male to female ratio of 2:1 or less; or HIV prevalence greater than or equal to 2% among women receiving prenatal care."</p> <p>Source: Public Health Agency Canada. <i>HIV and AIDS in Canada. Surveillance Report to December 31, 2008</i>. Surveillance and Risk Assessment Division, Centre for Communicable Diseases and Infection Control, Public Health Agency of Canada, 2009.</p>
Heterosexual Contact	Includes individuals reporting heterosexual activity with person(s) who is HIV positive or is at increased risk of HIV infection.
IDU	Individuals who report any Injection Drug Use.
MSM/IDU	Men who have sex with men AND indicate injection drug use (IDU).
MSM	Men who have sex with men (without report of IDU).
No Identifiable Risk	No identifiable risk (NIR) is the category assigned to a case when either no risk factor information is identified or available from the case report form, or if the case report form was not completed. Includes in the process of follow-up or lost-to-follow-up.
Perinatal	Mother-to-child transmission. Typically, this information is reported by specialist physicians directly to PHAC through the sentinel surveillance system: Canadian Perinatal Surveillance System.
Recipient of Blood/ Blood Products prior to 1985	Individual indicates that he/she received blood or blood products prior to 1985.
Occupational	Examples of occupational include: needle stick injury, exposure to blood or bodily fluids in an occupational environment.

### Abbreviations used in this report:

HIV	Human Immunodeficiency Virus
IDU	Injection drug use
MSM	Men who have sex with men
NIR	No identifiable risk
Recp B/B products	Recipient of blood or blood products prior to 1985

## Appendix B

CDC Case ID Number _____	Case Lab Req Number _____		
<b>Manitoba Health and Healthy Living</b> <b>HIV Case Investigation Form for Nominal &amp; Non-Nominal Positive Cases</b>			
			
<b>Specimen Collection Date (YYYY/MM/DD)</b> _____ <b>DO NOT USE THIS FORM FOR ANONYMOUS TESTING</b>			
<b>THIS SECTION TO BE COMPLETED FOR NON-NOMINAL TEST RESULTS ONLY</b>			
Non-Nominal Testing <input type="checkbox"/> Non-Nominal HIV Code _____			
Sex: <input type="checkbox"/> M <input type="checkbox"/> F <input type="checkbox"/> Transgender <input type="checkbox"/> Other _____			
<b>THIS SECTION TO BE COMPLETED FOR NOMINAL TEST RESULTS ONLY</b>			
Nominal Testing			
Surname _____ Given Name _____			
DIN (9 digits) _____ Sex: <input type="checkbox"/> M <input type="checkbox"/> F <input type="checkbox"/> Transgender			
MHSC Number (9 digits) _____ Birth Date (YYYY/MM/DD) _____			
Street Address _____ City/Town _____ Province _____ Postal Code _____			
Alternate Locating Information _____ Telephone (home/work/cell) _____			
Past History (complete when applicable)			
Previously Tested for HIV <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown _____			
Previous Non-nominal Code or Name used for positive HIV test _____ Date of last positive HIV test (YYYY/MM/DD) _____			
Date of first positive HIV test (YYYY/MM/DD) _____ Where tested positive (provincial/territory) _____			
Previous anti-retroviral therapy <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown _____			
Previous blood/tissue donation <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, most recent date (YYYY/MM/DD) _____ Hospital or Facility _____			
Self-identified Ethnicity (check one)			
<input type="checkbox"/> Caucasian <input type="checkbox"/> Aboriginal (specify) _____ <input type="checkbox"/> Black (i.e., African, Haitian, Jamaican, etc.) <input type="checkbox"/> First Nation on Reserve _____ <input type="checkbox"/> Asian (i.e., Chinese, Filipino, Japanese, etc.) <input type="checkbox"/> First Nation off Reserve _____ <input type="checkbox"/> South Asian (i.e., East Indian, Pakistani, Sri Lankan, etc.) <input type="checkbox"/> Métis _____ <input type="checkbox"/> Arab/West Asian (i.e., Armenian, Egyptian, Iranian, etc.) <input type="checkbox"/> Inuit _____ <input type="checkbox"/> Latin American <input type="checkbox"/> Other (specify) _____ <input type="checkbox"/> Refused to answer			
Country of Birth			
<input type="checkbox"/> Canada <input type="checkbox"/> Other (specify) _____ Year of arrival in Canada (YYYY) _____			
Risk Factors of Acquisition and Transmission (check all that apply)			
Sex with: <input type="checkbox"/> men <input type="checkbox"/> women <input type="checkbox"/> both <input type="checkbox"/> sex with multiple partners _____ <input type="checkbox"/> sex with trade worker _____ <input type="checkbox"/> sex with sex trade worker _____ <input type="checkbox"/> sex with anonymous partner _____ <input type="checkbox"/> sex with bisexual partner _____ <input type="checkbox"/> sex with person(s) who use injection drugs _____ <input type="checkbox"/> sex with known/suspected HIV positive person _____ <input type="checkbox"/> sex with person from HIV endemic country (Country) _____ <input type="checkbox"/> sex outside Canada (Country) _____  Number of sexual contacts in the past year _____ Number of IDU contacts in the past year _____ Date of last sexual exposure (LSE) (YYYY/MM/DD) _____ Date of last IDU exposure (YYYY/MM/DD) _____ <input type="checkbox"/> N/A			
Substance use during LSE (check all that apply): <input type="checkbox"/> alcohol <input type="checkbox"/> IDU (specify) _____ <input type="checkbox"/> other (specify) _____ <input type="checkbox"/> N/A			
In the past year: - use condom? <input type="checkbox"/> always <input type="checkbox"/> most of the time <input type="checkbox"/> some of the time <input type="checkbox"/> never <input type="checkbox"/> N/A - share injection equipment? <input type="checkbox"/> always <input type="checkbox"/> most of the time <input type="checkbox"/> some of the time <input type="checkbox"/> never <input type="checkbox"/> N/A			
Disease Reporting and Clinical Standards Information (check all that apply)			
As per Manitoba Health and Healthy Living protocol, individuals with HIV should be tested for associated STI and BBP			
Type	Parallel STI Test Performed on Case	Treatment Given to Case	Date of Treatment (YYYY/MM/DD)
GC	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Refused <input type="checkbox"/> N/A <input type="checkbox"/> Positive <input type="checkbox"/> Negative	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Refused <input type="checkbox"/> N/A	
CT	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Refused <input type="checkbox"/> N/A <input type="checkbox"/> Positive <input type="checkbox"/> Negative	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Refused <input type="checkbox"/> N/A	
Syphilis	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Refused <input type="checkbox"/> N/A <input type="checkbox"/> Positive <input type="checkbox"/> Negative	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Refused <input type="checkbox"/> N/A	
HBV	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Refused <input type="checkbox"/> N/A <input type="checkbox"/> Positive <input type="checkbox"/> Negative	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Refused <input type="checkbox"/> Immune <input type="checkbox"/> Vaccine	
HCV	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Refused <input type="checkbox"/> N/A <input type="checkbox"/> Positive <input type="checkbox"/> Negative <input type="checkbox"/> Indeterminate	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Refused <input type="checkbox"/> N/A	
Has the client been informed of HIV Ab test result? <input type="checkbox"/> Yes <input type="checkbox"/> No			
Has the client been referred to the Manitoba HIV Program and/or HIV specialist or ID physician? <input type="checkbox"/> Yes <input type="checkbox"/> No			
Has the client been informed of his/her legal obligation to notify current and future contacts of HIV status? <input type="checkbox"/> Yes <input type="checkbox"/> No (as per PH Legislation) <input type="checkbox"/> Yes <input type="checkbox"/> No Refuses Follow-up			
Client is aware, that unless stated otherwise, Public Health follow-up will occur?			
Number of contacts to be followed by (please complete separate contact notification form for each client)			
Contact notification to be completed by (check all that apply): <input type="checkbox"/> Public Health <input type="checkbox"/> Health Practitioner <input type="checkbox"/> Client (refer to HIV Guidelines)			
Form completed by (print Practitioner's name) _____ Telephone Number _____			
Signature _____			
Form completed by (print Public Health staff's name) _____ Telephone Number _____			
Signature _____			
Form completion date (YYYY/MM/DD) _____			
Confidential fax: 204-648-3044 Telephone: CDC Surveillance System (204-788-4756) January 16, 2008			

## Page 2 of HIV Case Investigation Form

Manitoba Health and Healthy Living HIV Case Investigation Form Instructions and Public Health Notes	
<b>Nominal testing or non-nominal testing</b>	Ensure the correct area is used. Nominal area is shaded.
<b>Point of Care HIV testing</b>	If standardized parallel or confirmatory HIV testing is not completed, then POCT reactive test results require the completion of a POCT Rapid Test Report to the CDC Branch as well as appropriate HIV follow-up and investigation.
<b>Non-Nominal Code Address</b>	If the client has tested non-nominally, do not complete the name, address, or PBN information. If the client has tested nominally, please ensure that client's primary permanent address is completed; if it differs from that provided on the lab report, provincial records will be updated.
<b>Past History</b>	It is necessary to link previous test results to be linked with current test (as per PHA). This section is important for the identification of repeat testers, interprovincial follow-up (if tested previously in another province), and possible identification of newly acquired infection. A case of new HIV infection is defined as a positive test with a unique code that has not been previously associated with a positive test in Manitoba.
<b>Ethnicity</b>	Clients should self-identify their ethnicity (and they have the right to refuse to answer). Aboriginal-specific categories have been requested by a number of Aboriginal communities and service providers.
<b>Risk Factors</b>	This information is valuable epidemiologic information used to inform programme and policy. Please encourage accurate reporting by clients for all activities that they have ever engaged in. Immigration from an HIV endemic country is not considered a risk factor. Immigrants from an HIV endemic country should self-identify risk factors.
<b>Informing</b>	Questions related to the information provided to clients re: legal obligations and referrals to specialist, will be used to assess adherence to provincial protocol. If not completed, provincial public health may contact you.
<b>MB Health Follow-Up</b>	If the client reports a sexual assault, an occupational exposure, a blood/blood product exposure, or blood/ tissue donation, Manitoba Health and Healthy Living staff may contact the person who completed the form for clarification.
<b>Region-Specific Questions for Case Management (or "Additional Questions for Case Management")</b>	
Additional locating information:	
Treatment information:	
Provider information:	
Other client information:	
Signature:	
<b>ONLY THE FIRST PAGE (the surveillance information) should be sent to Manitoba Health and Healthy Living:</b>	
Fax to: Manitoba Health and Healthy Living Public Health Directorate Disease Surveillance System Public Health Division, Manitoba Health and Healthy Living 4th Floor - 300 Carlton Street Winnipeg, Manitoba R3B 3M9 CONFIDENTIAL FAX: 204-949-3044 Telephone: Public Health Disease Surveillance System (204-788-6736)	
The health, social and legal consequences of not following through with HIV contact notification can be significant. All contacts must be notified and reported to Manitoba Health and Healthy Living; please use the Manitoba Health and Healthy Living HIV Contact Notification Form.	

**APPENDIX C**  
**HIV Descriptive Tables**

**Table 1a: Number of HIV Positive Cases in Manitoba, 1985-Decemeber 31, 2010**

<b>Years</b>	<b>Number of Female Cases</b>	<b>Number of Male Cases</b>	<b>Total Number of Cases</b>
<b>1985-2000</b>	132	714	<b>846</b>
<b>2001</b>	26	39	<b>65</b>
<b>2002</b>	28	41	<b>69</b>
<b>2003</b>	39	68	<b>107</b>
<b>2004</b>	39	61	<b>100</b>
<b>2005</b>	41	73	<b>114</b>
<b>2006</b>	29	49	<b>78</b>
<b>2007</b>	24	51	<b>75</b>
<b>2008</b>	35	53	<b>88</b>
<b>2009</b>	48	58	<b>106</b>
<b>2010</b>	37	87	<b>124</b>
<b>Total</b>	<b>478</b>	<b>1294</b>	<b>1772</b>

**Table 1b: Number of HIV Positive Cases in Manitoba  
By Age Category, Sex, and Year of Diagnosis**

<b>Age Category</b>	<b>Sex</b>	<b>1985-2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
<b>&lt;15</b>	M	7	0	0	0
	F	11	0	0	1
<b>15-19</b>	M	17	1	1	1
	F	18	7	6	2
<b>20-29</b>	M	311	10	11	22
	F	139	8	11	13
<b>30-39</b>	M	434	18	16	26
	F	124	9	21	11
<b>40-49</b>	M	209	16	22	20
	F	42	6	5	8
<b>50+</b>	M	118	8	8	18
	F	24	5	5	2
<b>Total</b>	M	<b>1096</b>	<b>53</b>	<b>58</b>	<b>87</b>
	F	<b>358</b>	<b>35</b>	<b>48</b>	<b>37</b>

**Table 2: Number of HIV Positive Cases in Manitoba  
By Geographic Residence, Sex, and Year of Diagnosis**

RHA	Sex	1985-2007	2008	2009	2010
Assiniboine	M	5	0	1	2
	F	1	0	0	0
Brandon	M	4	0	1	1
	F	3	1	1	1
Burntwood/ Churchill	M	15	2	2	0
	F	9	2	0	2
Central	M	43	3	0	2
	F	14	0	5	1
Interlake	M	36	1	1	4
	F	6	1	2	1
Norman	M	5	0	1	1
	F	1	1	0	1
North Eastman	M	12	2	2	2
	F	6	0	0	0
Parkland	M	5	0	0	1
	F	5	0	0	0
South Eastman	M	2	1	0	1
	F	1	0	0	0
Winnipeg	M	917	44	47	72
	F	298	30	40	31
Out-of-Province	M	23	0	2	1
	F	9	0	0	0
Unknown	M	1	0	1	0
	F	2	0	0	0
<b>Total</b>	<b>M</b>	<b>1068</b>	<b>53</b>	<b>58</b>	<b>87</b>
	<b>F</b>	<b>354</b>	<b>35</b>	<b>48</b>	<b>37</b>

Note: There were 31 cases from the period 1985-2000 that could not be assigned to current RHA geographic areas. These cases are excluded from the above table.

**Table 3: Number of HIV Positive Cases in Manitoba  
By Self-Reported Ethnicity and Year of Diagnosis**

Ethnic Category	1999-2007	2008	2009	2010
Aboriginal	248	36	30	41
Caucasian	212	14	22	35
African/ African-Canadian	160	13	19	25
Asian	20	1	2	4
Latin American	8	0	3	0
South Asian/ Arab/ West Asian	7	1	2	3
Other	1	3	0	0
Unknown/Missing	76	20	28	16
Total	732	88	106	124

Note: Collection of Ethnicity data began in 1999.

**Table 4: Number of HIV Positive Cases in Manitoba  
By Risk Exposure Category (Primary Mode of Transmission), Sex, and Year of Diagnosis**

Risk Exposure Category	Sex	1985-2007	2008	2009	2010
Endemic	M	84	4	3	13
	F	100	6	11	8
Heterosexual	M	204	11	16	22
	F	126	19	17	16
IDU	M	143	7	2	11
	F	91	1	3	3
MSM	M	507	17	17	25
MSM/IDU	M	56	0	2	2
NIR	M	68	14	18	13
	F	28	8	16	9
Occupational	M	2	0	0	0
	F	0	0	0	0
Perinatal	M	2	0	0	0
	F	1	0	0	1
Recp B/B products	M	30	0	0	1
	F	12	1	1	0
Total	M	1096	53	58	87
	F	358	35	48	37

Note: Abbreviations are listed in Appendix A, page 15.

## APPENDIX D AIDS Descriptive Tables

**Table 1: Number of Reported AIDS Cases and Deaths in Manitoba by Year of Diagnosis**

Years	Number of Cases	Number of Deaths
1985-2000	191	160
2001	10	6
2002	12	5
2003	16	8
2004	10	4
2005	9	5
2006	14	7
2007	7	4
2008	6	3
2009	2	0
2010	3	2
Total	280	204

Note: This data includes only those AIDS cases and deaths of AIDS cases that have been reported to Manitoba Health. Delays in reporting may occur, and not all deaths are necessarily reported. Please see Appendix A of this report for further reporting detail.

**Table 2a: Number of Reported AIDS Cases in Manitoba among Female Cases, by Age Category and Year of Diagnosis**

Females	1985-2000	2001-2005	2006-2010
<b>under 15</b>	1	0	1
<b>15-19</b>	0	0	0
<b>20-24</b>	1	1	1
<b>25-29</b>	1	3	2
<b>30-39</b>	6	6	8
<b>40-49</b>	3	6	2
<b>50+</b>	2	1	1
<b>Total</b>	<b>14</b>	<b>17</b>	<b>15</b>

**Table 2b: Number of Reported AIDS Cases in Manitoba among Male Cases, by Age Category and Year of Diagnosis**

Males	1985-2000	2001-2005	2006-2010
<b>under 15</b>	2	0	0
<b>15-19</b>	1	0	0
<b>20-24</b>	5	1	0
<b>25-29</b>	25	2	1
<b>30-39</b>	85	17	6
<b>40-49</b>	36	12	8
<b>50+</b>	23	8	2
<b>Total</b>	<b>177</b>	<b>40</b>	<b>17</b>

Note: Tables 2-5 have been aggregated into five-year groups due to small annual case counts in the past ten years.

**Table 3: Number of Reported AIDS Cases in Manitoba by RHA of Residence, Sex, and Year of Diagnosis**

RHA	Sex	1985-2000	2001-2005	2006-2010
Assiniboine	F	0	0	0
	M	3	0	0
Brandon	F	0	0	0
	M	4	0	1
Burntwood & Churchill	F	0	3	0
	M	1	0	0
Interlake	F	0	0	0
	M	3	1	0
NorMan	F	0	0	0
	M	1	1	0
North Eastman	F	0	1	0
	M	0	0	1
Parkland	F	1	0	0
	M	2	1	0
South Eastman	F	0	0	0
	M	1	0	0
Winnipeg	F	13	13	15
	M	158	37	13
Out-of-Province and Unknown	F	0	0	0
	M	4	0	2
Total	F	14	17	15
	M	177	40	17

**Table 4: Number of Reported AIDS Cases in Manitoba by Risk Factor Category (Primary Mode of Transmission) Among Female Cases**

Females	1985-2000	2001-2005	2006-2010
Recp B/B products	2	0	0
Endemic	2	4	4
Heterosexual	7	7	5
IDU	2	6	6
Perinatal	1	0	0
<b>Total</b>	<b>14</b>	<b>17</b>	<b>15</b>

**Table 5: Number of Reported AIDS Cases in Manitoba by Risk Factor Category (Primary Mode of Transmission) Among Male Cases**

Males	1985-2000	2001-2005	2006-2010
Recp B/B products	14	1	0
Endemic	2	1	0
Heterosexual	14	15	3
IDU	9	9	3
MSM	126	12	8
MSM/IDU	9	1	0
NIR	2	1	3
Perinatal	1	0	0
<b>Total</b>	<b>177</b>	<b>40</b>	<b>17</b>

**Abbreviations:**

MSM: men who have sex with men

IDU: injection drug use

MSM/IDU: both MSM and IDU reported as risk factors

Heterosexual: includes persons reporting heterosexual activity with person(s) at risk of HIV infection

Endemic: includes persons originating from or having traveled from or resided in an HIV-endemic country

Recp B/B products: recipient of blood/blood products prior to 1985

NIR: no identified risk

